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ABSTRACT

An overview of the babbling stage in child language acquisition, which occurs normally at age six months to one year, looks at research on this period. The babbling stage is preceded by arbitrary infant vocalization and is succeeded by production of simple but recognizable words. Babbling represents a period of increasing pattern and articulatory control, but without real words. The review of literature addresses the reasons babbling does not occur until about six months, the characteristics of this developmental stage, its benefits to the baby's language development, and several theories of babbling behavior. (Contains nine references.) (MSE)

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Babbling: a Definition & Overview of Theories

By Samsul Alam

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Children progress through various stages in order to learn a language. One of the first "stages" of language acquisition is the "prebabbling...and babbling period" (Lindfors 148). What exactly is "babbling", and how does it prepare a child for language acquisition? This paper shall focus on these questions, primarily the former. Importantly, the definition of "baby" in this paper shall be restricted to children age six months to approximately one year. Children under six months do not babble significantly (Ingram 98), and children over age one typically begin to develop recognizable words (such as "no!") in their vocabulary (Ingram 141). Thus, the period from six months to one year is the "ideal" babbling period.

In order to gain some perspective, it is important to understand why a child does not begin babbling until the age of six months. During the first year of life, a child is in the prelinguistic stage (Radford 20). This stage is marked "by the appearance of babbling" (Radford 21). Prior to the

babbling stage, a child will experience approximately six months of "prebabbling", which consists of arbitrary vocalization. The vocalization is "random...[and] include[s] a wide range of sounds [which does] not demonstrate a pattern or control" (Lindfors 148). In other words, the baby simply produces sound from his/her vocal cords, without any method or purpose. As stated above, this prebabbling stage typically occurs during the first six months of a child's life (Ibid).

From age six months to a year, there is more order in a child's speech. This is the babbling stage. There is more "pattern and articulatory control..." (Ibid), since the child is more knowledgeable about sound production. The child has heard mother and/or father speak to him/her for the past six months, and this has provided the child with an opportunity to listen to different sound patterns. At this stage, there is more "intonation, stress, [and] rhythm" (Ibid) in the baby's sounds. However, the child still cannot produce real words at this stage. Adults cannot understand what a child is saying at this stage. Thus, adults have labeled this stage of a child's speech development as "babbling", because, quite frankly, a baby's "speech" sounds like babble to adults. "Towards the end of the babbling period, children begin to develop a

language-specific phonology, identifying and producing segments of the target language, and combining them into (sequences of) 'nonsense' syllables such as [the following]: /ma/, /wa/, /ba/, etc..." (Radford 21). Are children trying to say something intelligible at this stage in their verbal development? Since Radford's estimation is that syllables at this stage are "'nonsense'" (importantly, he uses the word in quotes), one can assume that while the syllables may appear as unintelligible to adults, the syllables may actually be quite intelligible to babies at this stage. Plus, since a six to twelve month old baby possesses a repertoire of "cries" (Lindfors 148), (one for each cause of distress, which his/her caregivers learn to understand), one may be able to assume that the same applies toward verbal development.

Babbling does not really occur until approximately six months of age because a newborn to age six months does not have a fully matured vocal tract. The structure of their oral cavity, "which is much more restricted than adults," (Ingram 98) limits their capacity to produce sound. Also, "the vocal folds are positioned relatively high in the neonate" (Wood 36), and the neonates oral cavity is "a different shape than the adult cavity" (Ibid). In addition, the newborn's tongue takes up the majority of room in the

mouth (Ibid). Thus, newborns are not able to control their "breath stream with their tongues," since there is not much space for their tongue to move around in (Ibid). In addition, the newborn tongue's musculature is weak, and this prohibits sound production (Ingram 98). The pharynx and the velum are significantly different than an adults, as well. So, it appears that a newborn faces biological impediments in verbal production from day one. Thus, crying is the newborn's main source of communication (Ibid). However, at approximately six months, a baby is able to "produce sounds that are more easily recognizable to adults..." (Ibid). This occurs because the vocal tract has had some time to mature. Therefore, babbling does not significantly begin until the approximate age of six months (Ibid).

CHARACTERISTICS OF BABBLING

What are some of the characteristics of babbling?

1) Babbling is made up of "strings" of "alternating" consonants and vowels which are "well articulated..." (Gleason 72). Here, some order is evident, as opposed to the previous stage of "prebabbling", where no order is identifiable.

(list continued)

2) Usually consists of "closures that are released into an open vocal tract, giving the impression of a consonant-vowel syllable" (Locke 176)

3) Babbling is made up of "'sound patterns' (i.e. sequences with relatively consistent phonological and phonotactic properties..." (Radford 21)

4) As mentioned earlier, babbling is primarily found in babies age six months to approximately ten to twelve months

5) There is a rhythm in babbling (Locke 177, from Bickley, Lindblom, and Roug 1986)

6) Babbling is ludic and does not possess "referential meaning" (Anisfeld 222). It prepares the child for sound/language acquisition by attracting the child to its amusing properties (i.e. babbling is very musical and fun).

7) The sounds are primarily "pulmonic-lingual...[consisting mostly of] glottal and labial sounds..." (Cruttenden 3). These sounds might include fun labial sounds like raspberries which the baby might add for variety.

WHAT ARE THE BENEFITS OF BABBLING?

Some babbling is communication. Baby may wish to answer his/her parent(s) or significant others. Perhaps the child is trying to copy the patterns heard in adult speech. (von Raffler-Engel/Lebrun 40). This mimesis is a preparation for the time when baby will actually utter his/her first word, (what an exciting time that will be for parent(s) and baby) and may be termed "conversational or modulated babble" (Gleason 72).

Babbling is also beneficial because it's fun!

> "The pleasure for the baby at first consists simply in making movements combining his [her] breathing, laryngeal and articulatory apparatus. But the pleasure is rapidly enhances as he [she] discovers what sounds he [she] can make by this means" (Cruttenden 4).

This enhances baby's already enormous curiosity! Baby is irresistibly attracted to fun things, and making new sounds is extremely fascinating.

Another benefit of babbling is that the baby is educated on "the mechanism of speech, how to control it, and how to coordinate articulatory movements with breathing" (Anisfeld 223). The famous saying, "practice makes perfect" certainly applies here! Baby will practice repeatedly - almost to the point of driving mom and/or dad crazy! The baby's parent(s) will hear the same sounds over and over. The baby is simply fine-tuning the "mechanism of speech" (Ibid), and this takes a lot of time and effort.

While the above three hypotheses may be considered general knowledge (that baby babbles to communicate, to play and to learn through mimesis) more profound research has been done on the language acquisition of children. Let's move on to the theories of babbling by some well-known proponents in the field of verbal development of children. These experts include (but are not limited to) the following: Jakobson, Locke, and Oller (Ingram, Gleason).

OLMSTED'S THEORY

How a baby behaves in relation to babbling is the key to the Behaviorist Theory, which is the main view of the studies of Olmsted (Gleason 74). Olmsted's theory, like Jakobson's theory, is lacking, namely because it "predict[s] that development will follow a course of smooth, regular improvement towards and adult model [of language], without any regression..." (Ibid). However, not all children proceed at the same level of language acquisition, just as not all children learn to bounce a ball at the same age or tie their shoe at the same age or drink from a cup at the same age. Language acquisition, like all other skills, is very individual, and it appears interesting that both Jakobson and Olmsted chose not to be too concerned over this important aspect. Olmsted, like Jakobson, was concerned with progression, namely in progression of language acquisition based on "the most frequent phones of [the child's] language and then [a proceeding] to the least frequent ones" (Ibid). Here there is a linear progression, as in the case of Jakobson's theory.

LOCKE'S THEORY

A "version of the maturational theory" (Ingram 100), supported by Locke, appears to be more believable based on the standpoint that children develop at different rates.

However, it is still lacking because it is not "completely maturational" (Ibid). Locke hypothesized that the "babbling of infants in different linguistic communities will all be the same" (Ibid). One may wonder if this is a sound theory.

OLLER'S THEORY

Perhaps the most maturational theory prior to 1989 is the Refinement Theory (constructionist in form), where the baby is thought to "go through well-defined stages of vocalization where the earlier stages provide the building blocks for later ones" (Ingram 100). This theory does not purport to know exactly when the baby will go through these "stages", and thus estimations are given:

1) The Phonation Stage (0-1 month)

2) The GOO Stage (2-3 months)

3) The Expansion Stage (4-6 months)

And those which are particularly relevant to this paper:

4) The Reduplicated Babbling Stage (7-10 months): marked by the beginning of "well-formed syllables" (Locke 176) and,

5) The Variegated Babbling Stage (11-12 months): marked by "sounds having several different points of articulatory closure within multisyllabic strings (such as [daba])" (Ibid).

It is important to note, once again, that these "stages"

were formed on approximations in age. They were not meant to be carved in stone (Locke 175).

AN OVERVIEW OF THESE THEORIES

Who is to say which theory holds precedence over another? How can it be determined which theory (of the four discussed) is privileged?

First of all, Jakobson's theory, as stated previously, is somewhat lacking. It makes the assumption that children basically progress through the same stages in language acquisition through approximately the same times (Gleason). Is it wise to generalize in regards to the maturational rate of children? Probably not. While some children may say, "mama" as their first word, other children may not say a single word at all, until one day they surprise their parent(s) with a complete, well-structured sentence. Also, Anisfeld conjectures that "Jakobson's theory is an idealization...there is much less uniformity across children and much more variation within children than this theory would suggest" (Anisfeld 230). Thus, to sum up Jakobson's theory, although his theory led to further research and sparked much interest in the field of child language acquisition, it appears that his theory is outdated

in respect to the fact that children just cannot be clumped together and referred to in general terms.

Olmsted's theory (the Behaviorist Model), frankly speaking, is similar to Jakobson's in that it is universally based. As mentioned previously, Olmsted held the idea that children develop in a general fashion. Also, Olmsted was a strong proponent of "operant conditioning", which holds that children make sounds based upon responsive feedback from significant others. While this may be an important issue to consider, it is by no means a conclusive approach. Furthermore, according to Lindfors, the behaviorist model is quite simple in many respects, such as its inability to explain the following:

> "the species uniformity of language acquisition, (2) the species specificity of language acquisition, (3) the independence of language development from reinforcement for form, [and] (4) children's inferring of deep-level structure from an exposure to surface structure" (Lindfors 104).

to name a few. Apparently, Olmsted's theory may be deemed "lacking" as well.

Regarding Locke's theory, there is a lack of explanation as to the "hows" of language acquisition. Although his theory is considered more maturational than the two previous theories discussed, Locke believed that deaf children could babble "the same sounds as normal children do" (Ingram 112). His theory held that "linguistic

experience plays no role in development" (Ibid). Thus, it is questionable whether this theory is sound.

The final theory to discuss is Kim Oller's. In 1981, Oller stated that a child is an "active participant in the process [of language acquisition], ...'[that] suggests that the child is literally engaged in practice of phonetic contrasts and of combinatorial possibilities of an emerging vocalic system'" (Ingram 112, from Oller 1981:96). Oller's "stages" give language development researcher's a sound theory based on "roughed out" (Locke 175) approximations, which therefore preserves the validity that children progress in language at varying rates. Oller described these stages as "construction stages" (Ingram 109), indicating that he wished each stage to build upon the previous one, much in the same way in which a construction worker builds upon a foundation. In other words, for a child to learn a new language ability, he/she must first learn a previous one, as outlined in Oller's stages. However, Oller does not imply that these stages are binding. Based upon his idea of "construction", it is believable that his theory was based on more of a maturational sense than any of the other theories discussed.

Therefore, perhaps Oller's theories are more modern and sound than any of the other three theories presented in this paper. However, since there are many other theories in

regards to child language development, it would be presumptuous to say that Oller's is the privileged theory out of all of them. It is also presumptuous to assume that his voice is the authority in this regards.

CONCLUSION

In summation, babbling is a child's first step to language acquisition. While a child does not babble until approximately six months of age, he/she makes great strides in language acquisition simply by developing a repertoire of cries and glottal sounds. Once a baby begins to babble, it is only a matter of months before he/she begins to mouth his/her first words. While there are many "common sense" theories as to why a baby babbles, importantly some well-known theorists have conjectured on babbling and language acquisition as well. In regards to the theories of Jakobson, Olmsted, Locke, and Oller, perhaps the most believable theory is Oller's theory. Oller considered the fact that each child does not develop at a universal or general rate. This is primarily what makes his theory appear more valid. Whether or not one believes that Oller's theory is the most valid of the four theories presented in this paper, it is important to believe that each baby who babbles is making an important effort: the effort to communicate to the world and to develop important language skills which he/she will carry with him/her for the rest of life.

REFERENCES

Anisfeld, Moshe (1984) Language Development from Birth to Three Lawrence Erlbaum Associates, NJ. USA

Fletcher, Paul and Garman (1986) Language Acquisition, Cambridge University Press, London, UK.

Cruttenden, Alan (1979) Language in infancy and Childhood, Manchester University Press, England.

Gleason, Jean B. (1985) The Development of Language, CE Mervill Publishing co. OH, USA.

Ingram, David (1989) First Language Acquisition, Cambridge University Press, London, UK.

Lindfors, Judith W. (1987) Children's Language and Learning, Allyn and Bacon, Boston, MA, USA.

Locke, John L.(1993) The Child's Path to Spoken Language, Harvard University Press, MA, USA.

Radford, Andrew (1990) Syntactic Theory and the Acquisition of English Syntax, T.T. Press Ltd. Cornwall, England.

Von Raffer-Engel, Walburga and Lebrun, Yvan (1976) Baby Talk and Infant Speech, Swets & Zeitlinger B.V., Amsterdam